

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
22 December 2005 (22.12.2005)

PCT

(10) International Publication Number  
**WO 2005/121516 A1**

(51) International Patent Classification<sup>7</sup>: **F01N 3/08**,  
11/00, F02D 41/02, B01D 53/94, F02D 41/14

(21) International Application Number:  
PCT/IB2005/001612

(22) International Filing Date: 9 June 2005 (09.06.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
2004-173065 10 June 2004 (10.06.2004) JP

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

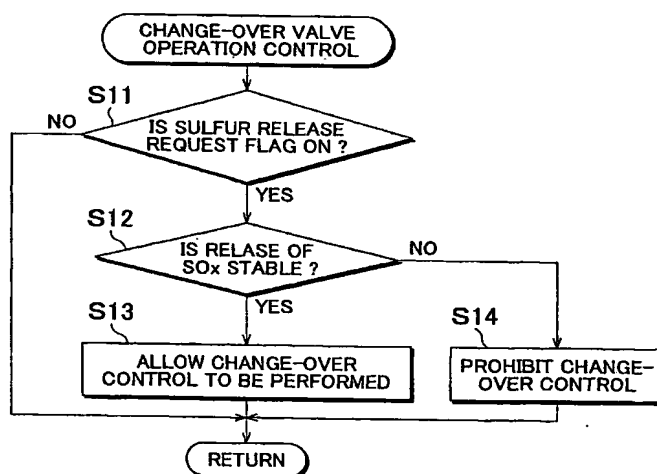
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **EXHAUST GAS CONTROL APPARATUS FOR INTERNAL COMBUSTION ENGINE**



(57) Abstract: There are provided a NO<sub>x</sub> storage reduction catalyst which is provided in an exhaust passage for an internal combustion engine, and concentration detection means whose detection state can be changed between a first detection state in which a total concentration of sulfur oxide and hydrogen sulfide in exhaust gas that has passed through the NO<sub>x</sub> catalyst is detected, and a second detection state in which a concentration of the sulfur oxide in the exhaust gas is detected. An operating state of the internal combustion engine is controlled such that the sulfur oxide is released from the NO<sub>x</sub> catalyst (sulfur poisoning recovery process). The detection state of the concentration detection means is alternately changed between the first detection state and the second detection state after the concentration detection means which is caused to remain in the second detection state detects release of the sulfur oxide from the NO<sub>x</sub> catalyst during the sulfur poisoning recovery process, whereby the concentration of the sulfur oxide and a concentration of the hydrogen sulfide are obtained.